2.0 FORT WAINWRIGHT

Introduction

A range construction project and a fiber optic and power cable installation project in the Yukon Training Area (YTA) were the focus of the archaeological work at Fort Wainwright in 2004. There were also several smaller archaeological survey projects that were completed in the Tanana Flats Training Area (TFTA) and within Fort Wainwright's main cantonment area. Work at the Donnelly Training Area (DTA) will be discussed in the next chapter.

Setting

Fort Wainwright is located in central Alaska, north of the Alaska Range in the Tanana River valley. The Post lies 120 miles south of the Arctic Circle near the cities of Fairbanks and North Pole in the Fairbanks North Star Borough. The installation consists of the Main Post, TFTA, YTA, Dyke Range and DTA (the latter of which lies near Delta Junction, within the boundaries of the former Fort Greely).

Fort Wainwright has the northern continental climate of the Alaskan interior, characterized by short, moderate summers, long, cold winters, and little precipitation or humidity. Average monthly temperatures in Fairbanks range from –11.5°F in January to 61.5°F in July, with an average annual temperature of 26.3°F. The record low temperature is -66°F and the record high is 98°F. Average annual precipitation is 10.4in., most of which falls as rain during summer and early fall. Average annual snowfall is 67in., with a record high of 168in. during the winter of 1970-71 (Natural Resources Branch 2002).

Fort Wainwright's training lands fall within an area occupied at the time of Euro-American contact by Lower-Middle Tanana Athabascans, including 'bands' described generally as the Salcha, Big Delta-Goodpaster, Wood River and Chena bands (McKennan 1981; Andrews 1975; Mischler 1986). Traditional settlement patterns were focused on a widely mobile season round, with the fall caribou hunt playing a pivotal role in subsistence preparations for the winter, while summer activities were focused at fish camps, and in berry and root collecting and sheep hunting (McKennan 1981). These activities were frequently a communal focus, with several local 'bands' connected by common interest, geography and intermarriage. Despite anthropological attempts to define 'boundaries' for the peoples living in the lower Tanana River valley, natural terrain served as the only definable 'boundary' to settlement patterns (McKennan 1981).

As Euro-American traders, miners, missionaries and explorers moved into the Tanana River valley, the traditional lifeways of local Athabascan groups were disrupted. Access to trade goods and the development of the fur trade not only affected traditional material culture, but also began to dramatically affect subsistence activities and settlement patterns. Similarly, the arrival of missionaries in the Alaskan interior profoundly affected traditional social organization. The introduction of mission schools for Native children and the doctrine of new religious beliefs contributed to an erosion of traditional settlement patterns and practices (McKennan 1981).

As Fairbanks grew in the first decade of the 20th century, several agricultural homesteads were developed on lands now encompassed by sections of the Fort Wainwright cantonment. These homesteads provided Fairbanks with a variety of

agricultural products and wood for fuel, but were subsumed when lands were withdrawn for the creation of Ladd Field, which later became Fort Wainwright (Price 2002).

Development in the Alaskan interior increased dramatically with the advent of World War II and subsequent military build-up in Alaska. Of particular significance was the development of airfields near Delta Junction (Fort Greely), Fairbanks (Ladd Field, later Fort Wainwright), and 26 miles southeast of Fairbanks (Eielson Air Force Base). These locations began as lend-lease bases and cold weather testing centers, but soon expanded with the increased need for military support during World War II and later the Cold War.

Archaeological research on Fort Wainwright's training areas has resulted in numerous technical reports (Bacon 1978; Bacon and Holmes 1979; Dixon et al. 1980; Frizzera 1973; Higgs et al. 1999; Holmes 1979; Potter et al. 2000; Rabich and Reger 1978; Robertson et al. 2004; Staley 1993; Yarborough 1975), scientific papers (Holmes and Anderson 1986; West 1967, 1975), and the identification of over 250 archaeological sites. Work on Fort Wainwright has been largely stratified sampling in nature, resulting at times in as little as 1 percent of the survey universe being inventoried. This work has largely focused on known sites and areas thought to be of the very highest potential for containing archaeological sites. Areas of less than ideal site potential have often been neglected and sites that may be eligible for nomination to the National Register of Historic Places have been incompletely documented or left un-evaluated. Thus, while a large number of important sites have been identified on Fort Wainwright, a number of important gaps exist in the cultural resource inventory.

Despite its incomplete nature, this rich archaeological record represents all of the accepted prehistoric cultures of the Alaskan interior. Of particular significance is the role played by archaeological resources located on Army lands in the definition of the Denali Complex of the American Paleoarctic Tradition (Anderson 1970; West 1967, 1981). Though not located on Army lands, two of the oldest well-dated sites in North America, Swan Point and Broken Mammoth, dated to between 11,500 and 12,000 before present (BP), are located just to the north of DTA East in the vicinity of Shaw Creek (Holmes 1996, 1998; Holmes et al. 1996; Yesner et al. 1999). Sites reflecting the influence of what has been termed the Northern Archaic Tradition (e.g. Anderson 1968; Workman 1978), dating to perhaps 6,000 to 2,000 BP, are also present on Fort Wainwright training lands, as are late prehistoric Athabaskan (e.g. Andrews 1975, 1987; Cook 1989; Mishler 1986; Sheppard et al. 1991; Shinkwin 1979; Yarborough 1978) and Euro-American archaeological sites (Gamza 1995; Phillips 1984). The significance of these known sites on Army Withdrawal Lands is attested by the fact that despite that nearly 100 of these sites remain to be evaluated, at least 50 individual sites and 3 archaeological districts have been deemed eligible for inclusion on the National Register of Historic Places, and a fourth archaeological district remains to be evaluated.

Historic research dealing with Fort Wainwright includes recent historic context studies that deal with homesteading (Price 2002), early mining (Neely 2001), and early transportation on Fort Wainwright (Neely 2003). Although mining was perhaps the most important economic endeavor of the late 19th century and early 20th century in the Fort Wainwright area, only three archaeological sites associated with mining have been recorded on Army managed lands in Alaska (Neely 2001). Several early transportation routes, roadhouses, and other structures associated with travel are known to exist in the vicinity of Fort Wainwright and the DTA, including the Donnelly-Washburn and Bonnifield

trails, for example (Neely 2003). Military training and construction activities have also resulted in several potential site types, including downed aircraft, defensive fighting positions, and training and target debris. The majority of these 'Base Ground Defense Sites' are difficult to assign to a specific context, and have often been consistently used for military training exercises; such sites have thus been determined ineligible for listing in the National Register of Historic Places (see Shaw 2000).

2.1 Fiber Optic and Power Cable Installation, Yukon Training Area

The United States Air Force (USAF), Eielson Air Force Base, has proposed to install fiber optic and power cables on poles in the YTA, Fort Wainwright, at the following locations (Figure 2):

1. along Brigadier Road (from Hill 3265 to the intersection of Brigadier, Quarry and Johnson Roads),
2. along Quarry Road (from the intersection of Quarry, Brigadier and Johnson to the intersection of Quarry Road and Skyline Drive)
3. along a short spur road (<2km) off of Brigadier Road
4. along one short spur (<1.5km) off of Skyline Drive
5. along East Beaver Creek Road (from its intersection with West Beaver Creek Road to Firing Point 16)
6. along the road to Camera Site I (from the intersection with Brigadier Road to Camera Site I)

The purpose of this action is to provide reliable power and communications capabilities to USAF remote threat emitters and communications hubs within U.S. Army Garrison Alaska's (USAG-AK) YTA. The poles for the fiber optic and power cables will be installed within a 30ft right-of-way on both sides of Brigadier, Quarry and East Beaver Creek Roads and the three shorter spur roads. The right-of-way where the poles will be placed will also be cleared of trees and other vegetation. The installation of poles and cables along this portion of the YTA road system is one phase of a larger fiber optic and power cable installation project. The Center for Environmental Management of Military Lands (CEMML) was contracted by USAF to complete a cultural resources survey for the proposed project.

Survey and Field Methods

At various times throughout June, July and August 2004, an archaeological survey crew comprised of between two and five archaeologists, employed by CEMML, conducted a cultural resources survey of the area of potential effect (APE) for the proposed project. Though all power poles will be placed within 30ft of the existing road, a survey corridor approximately 66m wide was established for this project. This includes a 30m corridor on each side of the road, in addition to the road itself (approximately 6m wide). A 30m corridor on each side of the road encompasses all probable impact areas, including staging areas (though no new staging areas are planned). The total survey area for this project was 1,002 acres.

Parallel pedestrian transects spaced at 10-20m were walked in all areas that were not deemed too wet or too steep (>40°) to contain cultural material. The majority of the roadbed within the project area was also walked and scanned for cultural material by at least two archaeologists. Systematic subsurface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. Shovel tests were approximately 40cm x 40cm, and were screened through ¼in. hardware cloth. Several hundred shovel tests were excavated throughout the project area in both high and medium probability areas. No cultural remains were located through the excavation of shovel tests.

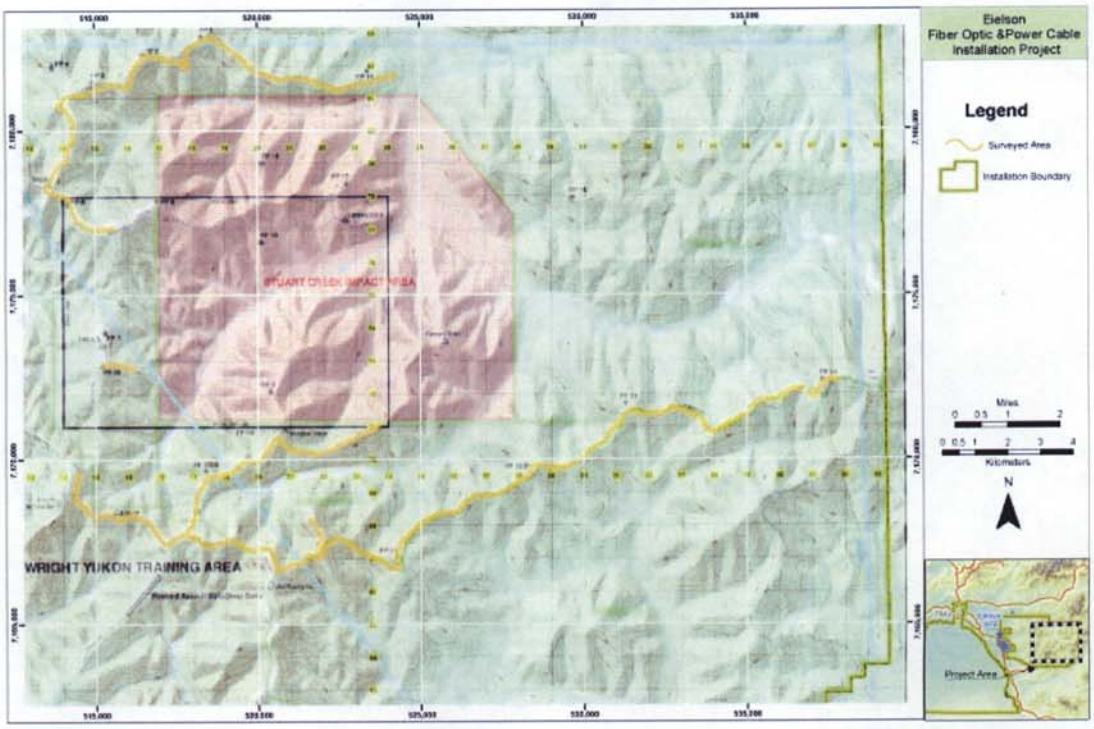

Figure 2. Fiber optic and power cable installation project area

An isolated artifact (XBD-00260) was found on the surface of during pedestrian reconnaissance. The entire road surface in this area was then intensively surveyed in an attempt to locate additional artifacts. Shovel tests were excavated on either side of the road adjacent to the find and in the general vicinity. No additional cultural materials were found as a result of these investigations.

Cultural Resources

There are five known sites located in proximity to the project area. All five sites were determined to be outside of the project area. Additionally, one new archaeological site was discovered during the survey for this project. These six sites are described below.

XBD-00093

Latitude:
Longitude:
Determination: Not eligible

This site consists of one coarse-grained beige chert flake found on the ground surface on the east side of (Holmes 1979). The flake may have been a biface thinning flake. The UTM coordinates for the site are:

Recommendations

This site is located north of the short spur road off of that was surveyed for this project and is outside of the APE. This site was previously found to be not eligible for the National Register on July 25, 1984. Because this site lies outside the APE for the proposed project it was not re-evaluated to determine eligibility for inclusion in the

National Register of Historic Places. If the APE is moved by later design alteration, or if further projects are proposed in the area, the site should be re-evaluated due to the extensive period of time that has passed since its initial evaluation.

XBD-00094
Latitude:
Longitude:
Determination: Not evaluated

This site consists of artifacts found scattered on the disturbed surface of a clearing at (Holmes 1979). The artifacts included six obsidian flakes, one rhyolite flake, three chert flakes, two retouched chert flakes and three fragments of a rhyolite scraper, in addition to two chalcedony flakes found in situ in a shovel test. The UTM coordinates for the site are:

The original description and map of this site (Holmes 1979), as well as a reinvestigation of the site (Cook 1979), indicate that it is outside the 30ft right-of-way for this project. Intensive investigations were conducted in the vicinity of this site for the proposed project in 2004 and no new materials were located. The entire right-of-way for the proposed project has been disturbed by heavy machinery and previous military activities, particularly in the vicinity of . What appeared to be shovel test pits from the Holmes and Cook investigations were also relocated, outside of the right-of-way. Testing was conducted just north of the site location and the in less disturbed areas with negative results.

Recommendations
This site is outside of the project area, and may have been entirely destroyed. This site was not evaluated to determine eligibility for inclusion in the National Register of Historic Places. If the APE is moved by later design alteration, or if further projects are proposed in the area, the site should be evaluated to determine its eligibility.

XBD-00103
Latitude:
Longitude:
Determination: Not eligible

This site consists of one coarse-grained translucent beige chert flake found on the surface of a disturbed area, on a small hill north of (Holmes 1979). The location of this site is . The UTM coordinates for the site are:

Recommendations
This spur-loop is not part of the proposed fiber optic and power project, and this site falls outside of the project area. This site was previously found to be not eligible for the National Register on July 25, 1984. Because this site lies outside the APE for the proposed project it was not re-evaluated to determine eligibility for inclusion in the National Register of Historic Places. If the APE is moved by later design alteration, or if further projects are proposed in the area, the site should be re-evaluated due to the extensive period of time that has passed since its initial evaluation.

XBD-00111
Latitude:
Longitude:
Determination: Not eligible

This site consists of three black chert flakes found on a disturbed surface adjacent to (Holmes 1979). This site was relocated in 2004 and one artifact was identified on the surface of . This artifact is a small piece of black basalt shatter. No subsurface testing was conducted. The UTM coordinates for the site are:

Recommendations
This site is located north of along an older, no longer used that is outside of the project area. This site was previously found to be not eligible for the National Register on July 25, 1984. Because this site lies outside the APE for the proposed project it was not re-evaluated to determine eligibility for inclusion in the National Register of Historic Places. If the APE is moved by later design alteration, or if further projects are proposed in the area, the site should be re-evaluated due to the extensive period of time that has passed since its initial evaluation.

XBD-00162
Latitude:
Longitude:
Determination: Not evaluated

This site consists of a single black chert flake on a hilltop in an area that had been extensively disturbed by military activities. The UTM coordinates for the site are:

Recommendations
This site is located north of the project area
and is outside of the project area. This site is also located in the Stuart Creek Impact Area, a portion of the YTA that has not been surveyed for cultural resources due to the danger of encountering unexploded ordnance or other dangerous materials. No further action is recommended.

One new archaeological site was discovered as a result of the survey work and is described below.

XBD-00260
Latitude:
Longitude:
Determination: Not eligible

This site consists of an isolated find of a fine-grained, black basalt unifacial scraper found on the surface of in the YTA (Figure 3). This artifact was found on a steep road surface (approximately 40 percent slope) and likely was transported to the area with fill for road construction or eroded out of deposits further up slope. The road surface in this area was intensively examined for additional artifacts, but none were

located. Shovel test pits were also excavated on both sides of the road where the artifact was found, as well as up slope and down slope of the find. The UTM coordinates for the site are:

Recommendations
Pedestrian survey and shovel tests produced a total of only one surface artifact. This finding suggests that XBD-00260 is an isolated find. The paucity of cultural material indicates that XBD-00260 does not contain additional information that is important to our understanding of the prehistory or history of the region and is not eligible for inclusion in the National Register of Historic Places. No further action is recommended.

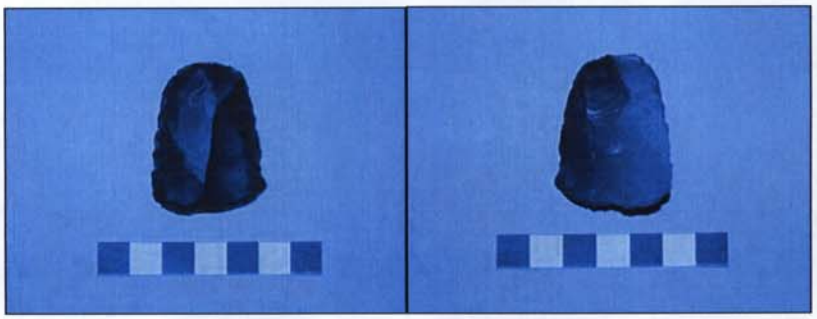

Figure 3. Unifacial scraper from XBD-00260 (left, dorsal, right, ventral)

Figure 4. General view of project area, Yukon Training Area

Results
Pedestrian survey and subsurface testing of the proposed power and fiber optic cable installation project identified one isolated find (XBD-00260). Site XBD-00260 was determined not eligible for inclusion in the National Register of Historic Places, and all other known sites in the YTA are outside of the project area. No historic properties will be affected by the proposed project and it was recommended that the project proceed.